## BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

In the Matter of the Application of	)	CASE NO. PAC-E-01-16
PacifiCorp, dba Utah Power & Light	)	
Company for Approval of Interim	)	
Provisions for the Supply of Electric	)	
Service to Monsanto Company	)	
	_)	

## DIRECT TESTIMONY OF DAVID L. TAYLOR

- 1 Q. Please state your name, business address and position with PacifiCorp
- dba Utah Power & Light Company (the Company).
- 3 A. My name is David L. Taylor. My business address is 825 N. E.
- 4 Multnomah, Suite 800. I am the Cost of Service Manager at PacifiCorp.
- 5 Q. Please briefly describe your education and business experience.
- 6 A. I received a Bachelor of Science degree in Accounting from Weber State
- College in 1979 and an MBA from Brigham Young University in 1986. I
- have been employed by PacifiCorp since the merger with Utah Power in
- 9 1989. Prior to the merger I was employed by Utah Power, beginning in
- 10 1979. At the Company I have worked in the Accounting, Budgeting, and
- Pricing and Regulatory areas. From 1987 to the present I have held
- several supervision and management positions in Pricing and Regulation.
- 13 Q. Have you appeared as a witness in previous regulatory proceedings?
- 14 A. Yes. I have testified on numerous occasions in California, Idaho,
- 15 Montana, Oregon, Utah, Washington and Wyoming.
- 16 Q. What is the purpose of your testimony?
- 17 A. I will present PacifiCorp's Cost of Service results in support of a new
- contract rate for Monsanto. The current contract between and Company
- and Monsanto expires on December 31, 2001. As part of the process to
- 20 negotiate a new contract, it is necessary to determine Monsanto's current

- cost responsibility. The cost of service study I am presenting shows
- 2 results based on the approach the Company feels is most appropriate,
- incorporating various suggestions that were agreed to with Monsanto's
- 4 representatives.
- 5 Q. Please identify Exhibit No. 1 (DLT-1) and explain what it shows.
- 6 A. Exhibit No. 1 (DLT-1) are summary tables from PacifiCorp's year end
- 7 December 1999 Class Cost of Service Study for the State of Idaho. Page
- one summarizes class cost of service results by customer group and by
- 9 function. Page two provides a more detailed summary of the functional
- 10 cost of service for Monsanto and page three provides that same
- information on a unit cost basis.
- 12 Q. Based on your cost of service results, what price would you support as a
- beginning point for a new contract with Monsanto?
- 14 A. Based on the results of the filed cost of service study, I support a
- beginning rate of 31.4 mills per kWh for firm service to Monsanto. At
- this rate Monsanto would be providing the same return on investment as
- the other customers in Idaho. I only support this rate if the Monsanto
- contract is subject to the same level of price changes as the collective
- change in base rates for all other Idaho customers.
- 20 Q. Please identify Exhibit No. 2 (DLT-2) and explain what it shows.

- A. Exhibit No. 2 (DLT-2) shows the rate components that PacifiCorp proposes as the starting price for the new Monsanto contract. The proposed rate components include a monthly customer charge, a seasonal demand charge, and seasonal on and off-peak energy charges. When these charges are applied to Monsanto's 1999 usage they produce an average price of 31.4 mills per kWh.
- 7 Q. What is the rate charged under the existing contract?
- A. The contract has a charge of 18.5 mills per kWh for all energy delivered,
  which is almost entirely interruptible under the contract. However, the
  contract also provided for Monsanto to make a \$30 million payment to
  the Company for the early termination of the prior power supply
  agreement between the parties. The amortization of that payment over
  the term of the existing contract, along with the 18.5 mills, effectively
  yields revenues from Monsanto of approximately 23.2 mills per kWh.
- Q. Why did you use the 1999 test period as the cost basis for the new Monsanto contract price?
- 17 A. The 1999 test period was used because both Idaho results of operations
  18 and a class cost of service study for that test period had already been filed
  19 with the Idaho Commission and audited by the Commission staff. Also,

- at the time we began discussions with Monsanto, it was the most recent test period for which we had full cost of service data.
- Q. Was the filed cost of service study prepared using the same methodology
   as the 1999 study previously filed with the Idaho Commission?

6

7

8

9

10

11

12

13

14

15

16

17

18

19

Α.

This class COS Study and the supporting jurisdictional results of operations were prepared using the same general methodology as previously filed studies with a few modifications. The primary change from earlier studies is that this study treats all special contract customers as firm, state situs customers. In previous studies, interruptible customers were removed from both jurisdictional results of operations and class cost of service studies. No costs were assigned to these customers and their revenues were treated as revenue credits which were allocated to all states and all classes of customers. In the case of Monsanto that means that the cost of serving Monsanto was removed from Idaho state responsibility and shared across all states. The revenue from Monsanto was then also removed from the Idaho results and allocated across all states as an offset to the jurisdictional revenue requirement responsibility. Additionally, after discussions with representatives of Monsanto, a few minor methodology adjustments were made that we felt presented results

1	that were more reflective of Monsanto's cost of service.	I will discuss
2	these later in my testimony.	

- Q. Why were interruptible customers historically removed from both jurisdictional revenue requirement and class cost of service?
- It is very difficult to accurately reflect the cost responsibility of an 5 Α. interruptible customer in the context of an embedded cost allocation. 6 Interruptible customers, based on the provisions of their individual 7 contracts, may reduce the peak load of the Company during certain hours, 8 and for this they are given a lower price. While the interruptible 9 provisions may reduce the need for some of the Company's peaking 10 capacity, they do not, however, offset the need for base load capacity. In 11 12 both the jurisdictional allocation and the class cost of service studies, the cost of base load generation and transmission capacity is allocated among 13 states and customer classes. If the interruptible customer's load is 14 included in the jurisdictional and class allocation, the costs associated 15 with that customer are overstated. If the interruptible customer's load is 16 completely removed, the costs are understated. 17

To avoid this conflict, a contribution to fixed cost standard was employed in evaluating interruptible and other non-tariff customers. When the Company had adequate capacity, or when market prices were well below

18

19

embedded costs, it made economic sense to keep customers on the system
as long as they were making contributions to fixed cost. If these large
customers left the system, any contributions they were making to fixed
costs would be lost and prices for other customers go up. Under the
contribution to fixed cost standard, the loads of these customers were
removed from the jurisdictional allocation. Had this not been done, the
full-embedded costs associated with the interruptible customer would be
allocated to the host jurisdiction, but the revenue from these customers
would be lower than embedded costs and other customers in the state
would be harmed. Under this situation, keeping the customer on the
system was a benefit to the total system but a detriment to the host state.

- Q. What are the reasons for changing the status of large special contract customers to firm situs customers?
- There are several reasons that system-wide revenue credit treatment is no A. longer appropriate. First, this approach has not proved acceptable to all Under the current approach, every state needs to become states. comfortable with the interruptibility terms and prices of every contract in every state. In the last few rate cases there have been proposals from intervenors and regulators in the various states to either impute revenue for the existing contracts in other states or to shift to situs assignment the

costs for those contracts. Second, market prices and the Company's
avoided costs now make the contribution to fixed cost standard much
harder to meet. In nearly every case prices under the contribution to
fixed costs standard would be higher than full embedded costs. Third,
including a price discount for interruptibility in an electric service
agreement assigns a fixed value to the interruptibility over the term of the
agreement. However, the drastic changes in the wholesale market over
the last couple of years have shown us that interruptibility can have very
different values at different points in time. Recognition of those different
values can best be dealt with in separate, shorter-term agreements. Also,
under the Company's Structural Realignment Proposal, there will be no
interjurisdictional allocation of costs to which system-wide revenue
credits can be applied. Each state electric company will have the
obligation to serve all the retail load in its service territory. If the current
interruptible loads are removed from the apportionment of the existing
generation and transmission resources, the state electric company will be
left without the resources to meet that obligation.
Additionally, there are proposed changes in the standards the Company
must meet in satisfying our reserve obligations. The WSCC formed the
Reserve Issues Task Force (RITF) in August 2000 in response to

concerns about the current contingency reserve requirements. The RITF has done studies and testing, and has developed preliminary recommendations that would dramatically change the existing contingency reserve standards. This is still under development and may not be implemented, but it is clear that, as proposed, the new criteria will reduce the total reserve requirement in the NWPP and make it more difficult to meet these requirements with customer curtailments.

Because of these reasons it is more appropriate to treat the sales of electricity from PacifiCorp to large contract customers under one agreement and to treat any interruptibility provisions a customer is able to provide under a separate agreement as a power purchase by PacifiCorp from that customer. Sales of electricity to customer such as Monsanto will be full firm service at embedded cost equivalent prices. The loads associated with firm service to these customers will be included as part of the jurisdictional allocation and included in the revenue requirement for the state where they are served. Any interruptible provisions will be treated as a purchase by the Company's power supply organization and included as a purchased power cost allocated among all states.

Q. How were the 1999 results of operations modified to accommodate situs treatment of the previously system allocated contracts?

1	A.	First, revenues from these contracts that were previously allocated across
2		all states were assigned directly to their home state. Next, the coincident
3		peak and energy data for these same customers were added back to their
4		respective home states. Finally, in recognition of the position of the
5		Commission staff that Idaho become a rolled-in state for jurisdictional
6		allocation purposes, the jurisdictional allocation method was changed
7		from modified accord to rolled-in.

Q. Previously you stated that you made some minor cost of service
 methodology changes from those previously filed. Can you describe
 those changes?

A. First, a separate class of service was created for Monsanto in the cost study with allocations based on Monsanto's total 1999 coincident peak demand and energy usage. Next, the Company and Monsanto reached an agreement to treat DSM as a customer service cost instead of a power supply cost. The majority of DSM costs in the State of Idaho are related to the weatherization of homes. An allocation factor based on demand and energy assigned 40% of the DSM costs to Monsanto. Because these costs are not incremental to serve Monsanto, a customer service based factor was instead employed to allocate costs in weatherization account 124. Finally, the target Return on Equity was lowered from the Company

- supported 11.5% to 9.8% (8.42% Return on Rate Base).
- 2 Q. How was the 9.8% ROE determined?
- The target ROE of 9.8% was selected to match the 1999 normalized rate 3 A. of return for the state of Idaho, on a rolled-in basis, prior to the inclusion 4 of Monsanto as a situs customer. Pricing the Monsanto contract to 5 produce 9.8% ROE leaves the return for the state of Idaho unchanged and 6 has no adverse impact on other Idaho customers. Because 9.8% ROE is 7 lower than recently approved returns in other states, however, the 8 9 Monsanto contract should be subject to any future revenue requirement changes in the State of Idaho. 10
- 11 Q. Please explain how the Cost of Service Study was developed.
- 12 A. The class COS Study is based on PacifiCorp's year-end December 1999 annual results of operations for the State of Idaho. The study employs a 13 generally referred 14 three-step process to as functionalization, classification, and allocation. These three steps recognize the way a 15 utility provides electrical service and assigns cost responsibility to the 16 groups of customers for whom those costs were incurred. 17
- Q. Please describe functionalization and how it is employed in the Cost ofService Study.
- 20 A. Functionalization is the process of separating expenses and rate base

items according to utility function. The production function consists of
the costs associated with power generation, including coal mining, and
wholesale purchases. The transmission function includes the costs
associated with the high voltage system utilized for the bulk transmission
of power from the generation source and interconnected utilities to the
load centers. The distribution function includes the costs associated with
all the facilities that are necessary to connect individual customers to the
transmission system. This includes distribution substations, poles and
wires, line transformers, service drops and meters. The retail services
function includes the costs of meter reading, billing, collections and
customer service. The miscellaneous function includes costs associated
with Demand Side Management, franchise taxes, regulatory expenses,
and other miscellaneous expenses.

- Q. Describe classification and explain how PacifiCorp uses it in the cost ofservice study.
- 16 A. Classification identifies the component of utility service being provided.

  17 The Company provides, and customers purchase, service that includes at
  18 least three different components; demand-related, energy-related, and
  19 customer-related.
- Demand-related costs are incurred by the Company to meet the maximum

1	demand	imposed	on	generating	units,	transmission	lines,	and	distribution
---	--------	---------	----	------------	--------	--------------	--------	-----	--------------

- 2 facilities. Energy-related costs vary with the output of a kWh of
- 3 electricity. Customer-related costs are driven by the number of
- 4 customers served.
- 5 Q. How does PacifiCorp determine cost responsibility between customer
- 6 groups?
- 7 A. After the costs have been functionalized and classified, the next step is to
- allocate them among the customer classes. This is achieved by the use of
- 9 allocation factors which specify each class' share of a particular cost
- driver such as system peak demand, energy consumed, or number of
- 11 customers. The appropriate allocation factor is then applied to the
- respective cost element to determine each class' share of cost. A detailed
- description of PacifiCorp's functionalization, classification and allocation
- procedures and the supporting calculations for the allocation factors are
- contained in my workpapers.
- 16 Q. How are generation and transmission costs apportioned among customer
- 17 classes?
- 18 A. Production and transmission plant and non-fuel related expenses are
- classified as 75% demand related and 25% energy-related. The demand-
- related portion is allocated using 12 monthly peaks coincident with the

- PacifiCorp system firm peak. The energy portion is allocated using class
- 2 MWhs adjusted for losses from the generation level.
- 3 Q. Are distribution costs determined using the same methodology?
- 4 A. No. Distribution costs are classified as either demand related or customer
- 5 related. In this study only meters and service drops are considered as
- 6 customer related with all other costs considered demand related.
- 7 Distribution substations and primary lines are allocated using the
- 8 weighted monthly coincident distribution peaks. Distribution line
- 9 transformers and secondary lines are allocated using the weighted non-
- 10 coincident peak (NCP) method. Service drop costs are allocated to
- secondary voltage delivery customers only. The allocation factor is
- developed using the installed cost of new service drops for different types
- of customers. Meter costs are allocated to all customers. The meter
- allocation factor is developed using the installed costs of new metering
- equipment for different types of customers.
- 16 Q. Please explain how customer accounting, customer service, and sales
- expenses are allocated.
- 18 A. Customer accounting expenses are allocated to classes using weighted
- 19 customer factors. The weightings reflect the resources required to
- 20 perform such activities as meter reading, billing, and collections for

1	different types of customers. Customer service expenses are allocated on
2	the number of customers in each class. Sales expenses are direct
3	assigned to the residential, commercial and industrial revenue classes and
4	then allocated to rate schedules within the revenue class according to
5	revenue.

- Q. How are administrative & general expenses, general plant and intangible
   plant allocated by PacifiCorp?
- Most general plant, intangible plant, and administrative and general expenses are functionalized and allocated to classes based on generation, transmission, and distribution plant. Employee pensions and benefits have been assigned to functions and classes on the basis of labor. Costs that have been identified as supporting customer systems are considered part of the retail services function and have been allocated using customer factors. Coal mine plant is allocated on the energy factor.
- Q. Are costs and revenues associated with wholesale and non-tariff contracts included in the cost of service study?
- 17 A. No costs are assigned to wholesale contracts. The revenues from these
  18 transactions are treated as revenue credits and are allocated to customer
  19 groups using appropriate allocation factors. Other electric revenues are
  20 also treated as revenue credits. Revenue credits reduce the revenue

- requirement that is to be collected from firm retail customers.
- 2 Q. Have you included your workpapers?
- 3 A. Yes. Work papers showing the complete functionalized results of
- 4 operations and class cost of service detail are provided in electronic
- format on the CD identified as Exhibit No. 3 (DLT-3).
- 6 Q. Does this conclude your testimony?
- 7 A. Yes it does.